














Work Order ID 59066

May 26, 2010 7:29:46 AM

Page 1

Item ID: D3955-041 Accept  Setup Start 
Revision ID:  Stop 
Item Name: Doubler Assembly
Start Date: 5/26/10 Start Qty: 4.00  Cust Item ID:
Required Date: 5/28/10 Req'd Qty: 4.00  Customer:
Reference:

Approvals: Process Plan:  Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3955	A								
100		0.00							
									
Waterjet		0.00							
FLOW CNC Waterjet									
6061 263									
	Memo								
	1-Cut as per Dwg D3955-1								
	Dwg Rev: 								
	Prog Rev: 								
	2-Deburr if necessary								
110		0.00							
									
QC		0.00							
Quality Control									

1810-5-27



1810-5-27

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 59066

May 26, 2010 7:29:47 AM



Page 2

Item ID:	D3955-041	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Doubler Assembly					
Start Date:	5/26/10	Start Qty:	4.00		Cust Item ID:	
Required Date:	5/28/10	Req'd Qty:	4.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		S10105107					
130 Small Fab Small Fab	1- C'sink holes as per dwg 2- Deburr if necessary Memo	0.00 0.00							
140 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00		S10105128					

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 59066

May 26, 2010 7:29:47 AM



Page 3

Item ID: D3955-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Doubler Assembly

Start Date: 5/26/10 Start Qty: 4.00



Cust Item ID:

Required Date: 5/28/10 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150

Chemical Conversion Coat per QS1005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

⑧ BK 10-5-31

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

10/05/31

8 0

170

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

10-5-31 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 59066

May 26, 2010 7:29:47 AM



Page 4

Item ID: D3955-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Doubler Assembly

Start Date: 5/26/10 Start Qty: 4.00



Cust Item ID:

Required Date: 5/28/10 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

0.00



Small Fab

Memo

0.00

Small Fab

1- Assemble nut plate as per dwg

8/5/10/06/01 (8)

190

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

8/10/06/01

(X8)

200

0.00



Packaging

Identify as per dwg & Stock Location: 106

Memo

0.00

Packaging

106 -1 (8) SP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 59066

May 26, 2010 7:29:47 AM



Page 5

Item ID: D3955-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Doubler Assembly

Start Date: 5/26/10 Start Qty: 4.00



Cust Item ID:

Required Date: 5/28/10 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/06/01

C2101611

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

May 26, 2010 7:29:45 AM

Page 1

Work Order ID: 59066

Parent Item: D3955-041

Parent Item Name: Doubler Assembly

Comments: IPP RevA: New issue DD verified by:EC

Start Date: 5/26/10

Required Date: 5/28/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6S.063

Purchased

No

100

sf

134.9000

0.3553

1.496

3.



6061-T6 .063 Sheet

10-5-07

Location

Loc Qty

Loc Code

MAT21

134.9

113608

134.9

MS21086L3

Purchased

No

180

Each

26.0000

1

4



Nut Plate

113608

4

10-5-31

8

Location

Loc Qty

Loc Code

ST304

26

112219

26

MS20427M3-3

Purchased

No

180

Each

662.0000

2

8



Rivet

8

8

10-5-31

8

Location

Loc Qty

Loc Code

ST318

662

112933

138

113064

524

16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	59064
Description: Doubler		Part Number:	D3955-1
Inspection Dwg: D3955	Rev: A	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.129	+0.005/-0.001	0.133	✓			
Ø0.201	+0.005/-0.001	0.203	✓			
0.750	+/-0.010	0.749	✓			
1.000	+/-0.010	1.002	✓			
1.250	+/-0.010	1.250	✓			
1.375	+/-0.010	1.377	✓			
2.38	+/-0.030	2.379	✓			
0.613	+/-0.010	0.613	✓			
1.313	+/-0.010	1.315	✓			
2.063	+/-0.010	2.066	✓			
2.563	+/-0.010	2.569	✓			
3.063	+/-0.010	3.069	✓			
4.813	+/-0.010	4.818	✓			
6.313	+/-0.010	6.316	✓			
7.313	+/-0.010	7.316	✓			
7.813	+/-0.010	7.813	✓			
8.199	+/-0.010	8.194	✓			
8.449	+/-0.010	8.449	✓			
9.188	+/-0.010	9.190	✓			
9.438	+/-0.010	9.441	✓			
10.413	+/-0.010	10.414	✓			
10.75	+/-0.030	10.746	✓			
0.063	+/-0.010	0.062	✓			

Measured by: IB	Audited by: S	Prototype Approval:	N/A
Date: 10-5-27	Date: 10/05/27	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.07.29	New Issue	KJ	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

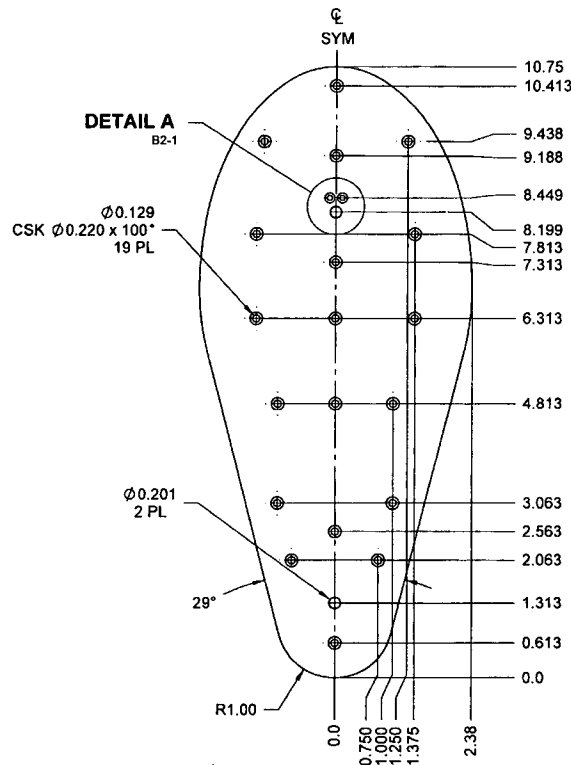
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D3955-041	DOUBLER ASSY
2	1	D3955-1	DOUBLER
3	1	MS21086L3	NUT PLATE
4	2	MS20427M3-3	RIVET



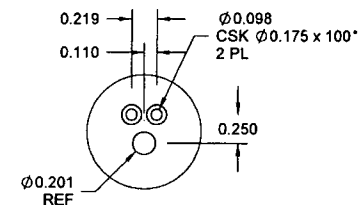
0.063
REF

INS
MS
MS

CSK SIDE

D3955-1
DOUBLER

INSTALL
MS21086L3 NUT PLATE
MS20427M3-3 RIVET, 2 PL



DETAIL A D7-1
SCALE 2X





RELEASED
09/07/22 NMP

D3955-041 DOUBLER ASSEMBLY

D3955-1 DOUBLER

D3955-1 NOTES:

- D3955-T NOTES:**
 1) MATERIAL: 6061-T6 ALUMINUM, 0.063 THICK SHEET PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF. DART SPEC. M6061T6.063)
 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: IDENTIFY WITH DART ASSEMBLY P/N "D3955-041" USING FINE POINT PERMANENT INK MARKER
 7) WEIGHT: 0.25 lbs

A	NEW ISSUE		RF	09.07.21
REV.		DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3955 TITLE SKIDTUBE TUNING KIT	REV. A	
DRAWN	RF		SHEET 1 OF 5	
CHECKED			SCALE	
MFG. APPR.			NTS	
APPROVED				
DE APPR.				
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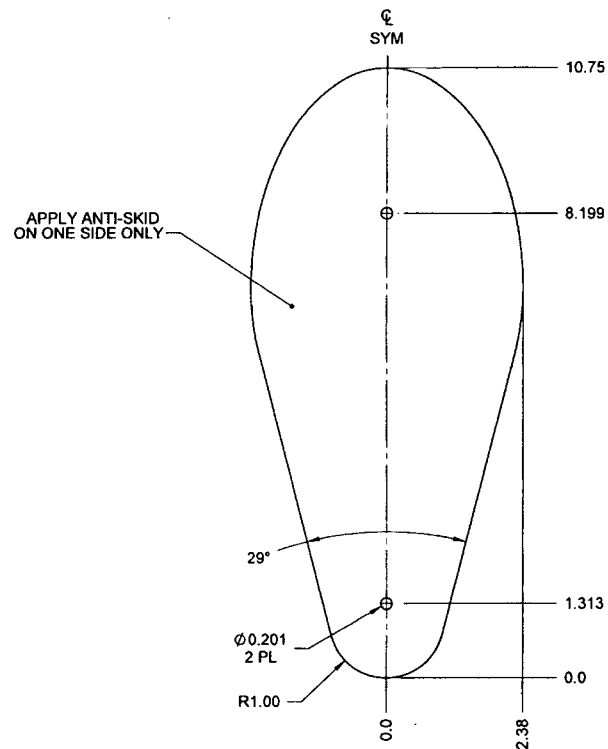
Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3955-3 COVER PLATE

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 0.060 (16 GA) THICK (REF. DART SPEC. M304S16GA)
- 2) FINISH: BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3955-3" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.64 lbs

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3955	SHEET 2 OF 5
APPROVED		TITLE	SCALE
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RELEASED
09/07/21 WLD

WLD
59066

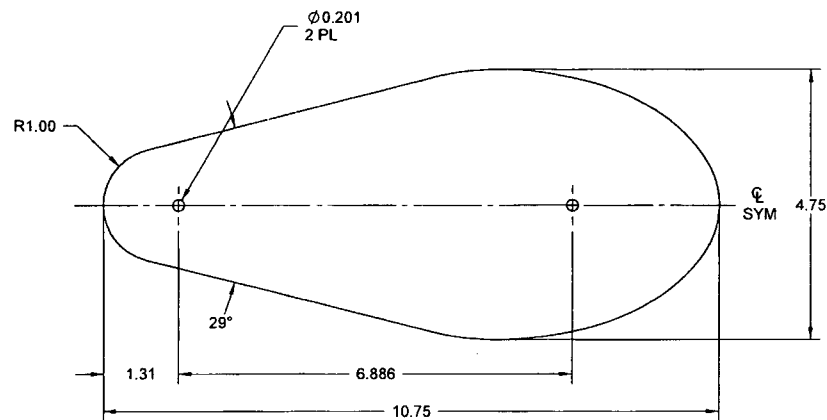
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3955-X PLATE

General Table			
P/N	T (in)	T (GA)	WEIGHT (lbs)
D3955-5	0.060	16	0.64
D3955-7	0.120	11	1.28

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, T (GA) THICK (REF. DART SPEC. M304S'T'GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3955-X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: SEE TABLE

RELEASED
9/1/82 MBD

DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	<i>BD</i>	D3955	SHEET 3 OF 5
APPROVED	<i>MD</i>	TITLE	SCALE
DE APPR.	<i>#</i>	SKIDTUBE TUNING KIT	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

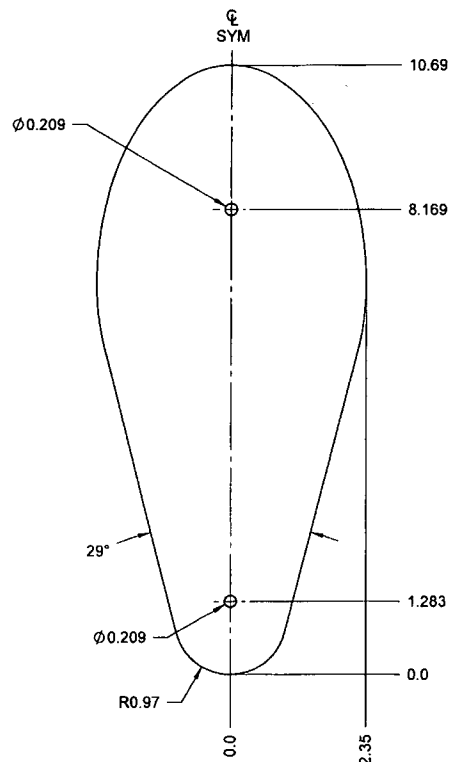
8 7 6 5 4 3 2 1

D

C

B

A



D3955-21 GASKET

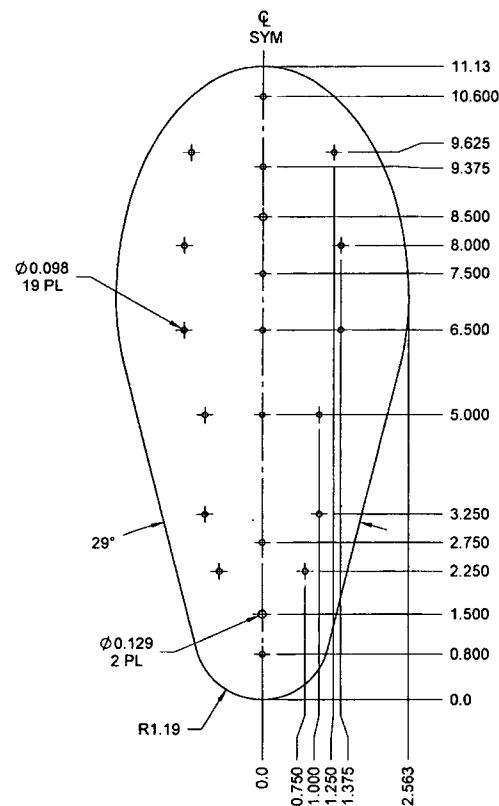
D3955-21 NOTES:

- 1) MATERIAL: BLACK NEOPRENE SHEET, 0.063 THICK, 60 DUROMETER
(REF. DART SPEC. M-NEO60-S.063)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3955-21" USING YELLOW PAINT MARKER
- 7) WEIGHT: 0.08 lbs

RELEASED
21/07/22 M

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3955	SHEET 4 OF 5
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8 7 6 5 4 3 2 1



D3955-23 TEMPLATE

NOTES:

- 1) MATERIAL: 6061-T6 ALUMINUM, 0.040 THICK SHEET PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF. DART SPEC. M6061T6S.040)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3955-23" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.16 lbs

RELEASED
01/07/22

DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. D3955	REV. A
MFG. APPR.			SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SKIDTUBE TUNING KIT	NTS
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